

MATERIAL SAFETY DATA SHEET

Liquid Hardener

Date of Original Preparation: June 18, 2001

Revision Date: December 16, 2004

Section 1 - Product Information

Manufacturer: Bondo Corporation
3700 Atlanta Industrial Parkway NW
Atlanta, GA 30331

Emergency Telephone: For US transportation emergencies call - Chemtrec: 800-424-9300 For Canadian transportation emergencies call - Canutec: 613-996-6666

Information: 404-696-2730 (USA 8:30am – 4:30pm Eastern Time) **Product Use:** Hardener

Stock Number: 912, 912C

Emergency Overview

Signs of Overexposure: Nausea, cough, dizziness, weakness, headache, chest pain, lack of coordination, shortness of breath, dermatitis, redness and/or pain in eyes.

Emergency First Aid: Move to fresh air, remove contaminated clothing, wash effected skin with soap and water, do not use solvents or thinners; if product gets into eyes, remove contact lenses, flush with water for 15 minutes.

Handling: When handling, wear an organic vapor cartridge respirator (NIOSH / OSHA), solvent resistant gloves and safety eye protection designed to guard against liquid splashes. Close all containers tightly after use. Do not eat, drink or smoke in work areas.

Clean-up: Eliminate sources of ignition. Dike to reduce extent of spill if liquid. Remove with inert absorbent (vermiculite, perlite) using non-sparking tools. Transfer to a grounded metal container, seal container. Dispose of as hazardous waste.

Other Precautions: Material has an offensive odor. Prolonged exposure may reduce the user's sensitivity to the odor, thus reducing the effectiveness of odor as a warning against exposure.

Fire Fighting: Organic peroxide, refer to Guide 145 of the North American Emergency Guide Book.

NFPA Flammability: Containers of hardeners are not expected to cause fire fighting problems since the individual quantities are quite small.

Bondo Corporation has no oversight with respect to the guidance practices or policies or manufacturing processes of other companies handling or using this material. The information given in this MSDS is only related to the product as shipped in its original condition as described in Section 2, "Hazardous Ingredients" and Section 9 "Physical and Chemical Properties".

Section 2 - Hazardous Ingredients

Hazardous Ingredient	% by weight	CAS No.	Vapor Press.	ACGIH TLV	OSHA PEL	LD ₅₀ Oral	LD ₅₀ Derm	LC ₅₀ Inhal.	LEL
Hydrogen Peroxide	1-5%	7722-84-1	1.0	1.4mg/m ³	1.4mg/m ³	75	700	2000	n. ap
Methyl Ethyl Ketone Peroxide	30-40%	1338-23-4	n. ap.	0.7ppm	0.2ppm	484	n. av.	200	n. av
Dimethyl Phthalate	50-60%	131-11-3	n. ap.	5mg/m ³	5mg/m ³	6800	n. av.	1213	n.ap

LD₅₀ Oral - rat mg/m³, LD₅₀ Dermal - rabbit mg/m³, LC₅₀ Inhalation - rat mg/m³ unless otherwise specified.

Section 3 – Hazards Identification

Primary Routes of Entry: Inhalation, skin contact, ingestion, eyes.

Exposure Effects Acute and Chronic:

Inhalation: Acute: Nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, central nervous system depression. Vapors are corrosive to nose, throat and lungs.

Skin contact: Acute: Extraction of natural oils with resulting dry skin, irritation, redness and dermatitis.

Eye contact: Acute: Contact may cause severe eye damage.

Ingestion: Acute: Very corrosive; may be harmful or fatal.

Chronic: Repeated overexposure to these products may cause central nervous system damage, kidney damage, liver abnormalities, lung damage, cardiac abnormalities, reproductive organ damage, skin sensitization and dermatitis.

Other Health Effects: Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Section 4 – First Aid Measures

Emergency and First Aid Procedures: In all cases if symptoms persist, seek medical attention.

Inhalation - move to fresh air, give artificial respiration if necessary.

Skin contact - remove contaminated clothing, wash with soap and water or recognized skin cleaner. Do not use solvents or thinners.

Eye contact - contact lenses must be removed, flush with water for at least 15 minutes, consult a physician immediately.

Ingestion - drink one or two glasses of water to dilute. Do not induce vomiting. Consult a physician or poison control center immediately. Treat symptomatically

Medical Conditions Prone to Aggravation: Pulmonary conditions, skin disorders, eye disorders, liver conditions, kidney conditions, neurological disorders, allergies, pregnancy, reproductive system disorders.

Section 5 – Fire Fighting Measures

Flash Point (SFCC): >200F

Lower Explosive Limit: not available

Extinguishing Media: foam, carbon dioxide, dry chemical or water fog or spray. Water jet or stream is unsuitable.

Unusual Fire and Explosion Hazards: Invisible vapors may travel to source of ignition and flash back. Since vapors are heavier than air, dangerous concentrations may not be apparent to casual observation. Keep containers tightly closed, isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Obtain medical attention. Peroxides and decomposition products are flammable and can ignite with explosive force if confined.

Special Fire Fighting Procedures: Water should be used to cool containers exposed to fire. Fire fighting personnel should wear self-contained breathing apparatus.

Section 6 – Accidental Release

Steps To Be Taken In Case Material Is Released Or Spilled: Remove all sources of ignition. Avoid breathing vapors, ventilate confined area. Remove with inert absorbent using non-sparking tools. If necessary report to applicable government agency.

Section 7 – Handling and Storage

Precautions To Be Taken In Handling And Storing: Minimize contact between the worker and this material. Do not transfer to unlabeled containers. No smoking. Store plastic containers inside closed, approved boxes or safety cabinets. Store containers out of sun and away from heat, sparks, and open flames. Close all containers after each use. Consult NFPA and local codes for additional storage requirements.

Hygienic Practices: Do not eat, drink or smoke in work areas. Wash hands before eating, smoking, or using the washroom. Launder clothing before reuse.

Other Precautions: Do not take internally. Observe label precautions. Keep closures tight and container upright to prevent leakage. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by regulations.

Section 8 – Exposure Controls

Primary Routes of Entry: Inhalation, skin contact, ingestion, eyes.

Respiratory Protection: If monitoring demonstrates levels below TLV or PEL wear a NIOSH/MSHA approved respirator device. See safety equipment supplier for evaluation and recommendation.

Ventilation: Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL.

Protective Gloves: Required for prolonged or repeated contact. Use solvent resistant gloves. Barrier creams are not substitutes for full physical protection. Refer to safety equipment supplier for effective glove recommendations.

Eye Protection: Use safety goggles or face shield designed to protect against splash of liquids when spraying or when working with open liquids such as during mixing or pouring.

Other Protective Equipment: Eye bath and shower should be available. Use chemical resistant apron, boots or other clothing if needed to avoid repeated or frequent contact. Liquid may penetrate shoes and leather causing delayed irritation.

Section 9 – Physical and Chemical Properties

Evaporation Rate: Slower than ether

Vapor Density: Heavier than air

Physical state: liquid

Weight per Gallon (Specific Gravity): 9.8 lb/gal (1.17)

Freezing point, Coefficient of water/oil distribution ,pH: Not applicable or not available

Section 10 – Stability and Reactivity

Stability: Unstable

Conditions Contributing to Instability: Thermal decomposition, contamination

Incompatibility (Materials to Avoid): Strong acids, strong alkalis, strong oxidizers, reducing agents, accelerators

Hazardous Decomposition Products: On decomposition, peroxides can produce flammable and toxic vapors.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Ignition sources, temperatures above 140°F (60°C). Recommended maximum storage temperature: 104°F (40°C).

Section 11 - Toxicological Information

Carcinogenicity (risk of cancer): None known

Sensitization (effects of repeated exposure): These products may cause skin and inhalation sensitization to certain individuals.

Teratogenicity (risk of malformation in an unborn fetus): None known

Reproductive Toxicity (risk of sterility): None known

Mutagenicity (risk of heritable genetic effects): None known

Threshold Limit Value: None established for this product. For further information, see Section 2 - Hazardous Ingredients

Section 12 - Ecological Information

General Information: Avoid runoff into ground, storms or sewer which lead into waterways. Water runoff can cause environmental damage. The nature and packaging size of this product minimizes the potential for adverse ecological impact.

Environmental Impact Data (percentage by weight):

Ozone Depleters: none Heavy Metals: none There are extensive ecological data available on the various components of these products. An adequate representation of all these data is beyond the scope of this document. Please contact the information phone number found in Section 1.

Section 13 – Disposal Information

Waste Disposal Method: Dispose of in accordance with federal, state or provincial and local pollution requirements. Clean preferably with a detergent, avoid the use of solvents. This information applies only to the material as manufactured; processing, use or contamination may make this information inappropriate, inaccurate or incomplete. The generator of the waste has the responsibility for proper waste classification, transportation and disposal.

Section 14 – Transportation Information

Ground Shipments only:

Consumer Commodity ORM-D

Section 15 - Regulatory Information

OSHA: These products are considered hazardous under the Federal OSHA Hazard Communication Standard.

WHMIS: D1B;D2B;F

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311 / 312 Hazard Categories: Immediate health, delayed health, fire hazard.

Section 313 Toxic Chemicals: dimethyl phthalate. You may be required to submit this MSDS to state and local emergency response agencies (SERC & LEPC) and to your local fire department. Also, you may be affected by other sections of this law, depending on the chemicals and amounts that you inventory at your location. To learn more about your responsibilities, call the EPA Hotline (800) 535-0202.

TSCA status: All ingredients are TSCA registered.

Section 16 - Preparation Information

Prepared by Bondo Corporation Research and Development Department

Phone: 404-696-2730

Do not handle until the manufacturer's safety precautions have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all products with which they come in contact.

While Bondo Corporation believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Bondo Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, provincial and local laws and regulations.